

2. Document: NUREG-1437 Supplement 28: Generic Environmental Impact Statement for License Renewal of Nuclear Plants Regarding Oyster Creek Nuclear Generating Station Final Report.

<http://www.nrc.gov/reading-rm/doc_collections/nuregs/staff/sr1437/supplement28/index.html>

Accessed: 27 Jan. 2007

3. The EIJ problem: AmerGen Energy Company is in the process of renewing its Operating License for Oyster Creek Nuclear Generating Station in Forked River, NJ for 20 more years.

4. What the document says: Supplement 28 to NUREG-1437 says that the adverse impacts of renewing the license for Oyster Creek Nuclear Generating Station are not great enough to make renewal an unreasonable option for decision-makers.

5. Thesis: AmerGen Energy Company's operating license for Oyster Creek Nuclear Generating Station should not be renewed for twenty years because (1) the nuclear reactor is vulnerable to large-scale sabotage or terrorist attacks; (2) the high population density of the region near the facility would make evacuation unfeasible; (3) proper consideration has not been given to alternatives to license renewal, especially renewable energy sources and (4) the integrity of the drywell containment liner is in question.

6. Deadline: May 2007 if no more hearings; early 2008 if additional hearings are done.

7. Importance: Oyster Creek is just one of many aging nuclear power plants that were built in the late 1960s and are currently in the re-licensing process.

Comments: New Jersey Governor and Senators, state and local NGOs, state and local media.

8. Argument-Objection-Response Sentences

Argument 1: AmerGen Energy Company's operating license for Oyster Creek Nuclear Generating Station should not be renewed because (1) the nuclear reactor is vulnerable to large-scale sabotage or terrorist attacks (Leventhal and Hoenig 1987, pp.1-21 and Ferguson 2004, pp.34-46) which would release large amounts of harmful ionizing radiation (Hatch et al. 1991, pp.719-724).

Objection 1: Argument 1 is questionable because studies have shown that nuclear reactors can withstand the impact of a single plane (Fisher 1989, p.14).

Response 1: While the impact of single planes on nuclear reactors has been tested, Objection 1 is questionable because this study did not examine the impact of multiple planes or other methods of attack (Fisher 1989, p.14).

Argument 2: AmerGen Energy Company's operating license for Oyster Creek Nuclear Generating Station should not be renewed because (2) the high population density of the region near the facility would make evacuation unfeasible (Chen 2006, pp.321-338).

Objection 2: Argument 2 is questionable because the New Jersey Office of Emergency Management has come up with a Community Emergency Planning Information that details the evacuation process (NJ OEM 2005).

Response 2: Objection 2 is questionable because this plan only accounts for the region within a 10-mile radius of the plant (a population of less than 250,000) while the region with a 50-mile radius has a population of about 4.2 million (US NRC 2007).

Argument 3: AmerGen Energy Company's operating license for Oyster Creek Nuclear Generating Station should not be renewed because (3) proper consideration has not been given to alternatives to license renewal, especially renewable energy sources (US NRC 2007).

Objection 3: Argument 3 is questionable because the Nuclear Regulatory Commission staff concluded that environmental impacts of renewable energy options could vary from small to large depending on the location, size, and number of facilities (US NRC 2007).

Response 3: Objection 3 is questionable because saying that the impacts can range from small to large is not really a conclusion; instead it is appealing to ignorance (Shrader-Frechette 2005); also studies show the long-term benefits of solar and wind power outweigh nuclear power (Pimentel et al. 1994).

Argument 4: AmerGen Energy Company's operating license for Oyster Creek Nuclear Generating Station should not be renewed because (4) the integrity of the drywell containment liner is in question (Sullivan and Wald 2007, Quintenz 2007).

Objection 4: Argument 4 is questionable because the investigation by Sandia National Laboratories shows that allowable stresses are met for the structure (Sandia National Laboratories 2007).

Response 4: Objection 4 is questionable because this report admits that it is based on limited raw data and only examined a small portion of this structure (Sandia National Laboratories 2007).

9. References:

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